

**General Permit to Operate and/or Construct a  
Surface Coating Operation**

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## **General Permit to Operate and/or Construct a Surface Coating Operation**

### **Section 1. Authority**

This General Permit is authorized by Rule 200 and Rule 230 of the Maricopa County Air Pollution Control Regulations (Rules) pursuant to Section 49-480.J of the Arizona Revised Statutes. In that the Arizona Department of Environmental Quality has not issued a general permit for a Surface Coating Operation in Maricopa County as defined herein, the Maricopa County Environmental Services Department (Department) is authorized to issue this General Permit.

### **Section 2. Definitions**

**A.** For the purposes of surface coating operations of this General Permit, the following definitions shall apply:

- 1) ADHESIVE** - A material used for the primary purpose of bonding two or more surfaces together.
- 2) AEROSOL CAN** - A non-refillable hand-held container from which a product is dispensed by means of pressurized propellant packaged within the container.
- 3) AIR-DRIED COATING** - A coating which is dried by the use of air or forced warm air at temperatures up to and including 200°F (93.3°C).
- 4) AUTOMATIC GUN CLEANING MACHINE (GUN CLEANER)** - A machine, which after being loaded, cleans paint spray guns without the assistance of a person.
- 5) BAKED COATING** - A coating that is dried or cured in an oven in which the oven temperature exceeds 200°F (93.3°C).
- 6) CAN COATING** - Any coating used in the production of metal cans.
- 7) CAN PRINTING INK** - A fluid or viscous formulation used in can printing that imparts design, pattern, and/or alphanumeric symbols to a can.
- 8) CLEAR COAT** - Any coating which lacks color or opacity or is transparent.
- 9) COATING AS APPLIED** - Refers to coating at the time immediately prior to its application, including any final addition of solvent to the coating before such coating is applied.
- 10) COIL COATING** - Any coating applied to the surface(s) of flat metal sheets or strips that are formed into rolls or coils not used to make cans.
- 11) DAY** - A period of 24 consecutive hours beginning at midnight.
- 12) DEPARTMENT** - The Maricopa County Environmental Services Department.

- 13) **DILUENT** - Any fluid in or added to a coating such as thinner, retarder, reducer, solvent, or drying accelerator which solubilizes, adjusts concentration, viscosity, flow, or drying rates and which evaporates as the coating film solidifies and cures.
- 14) **ELECTROSTATIC SPRAY/SYSTEM** - A method of applying atomized paint by electrically charging the coating and the object being coated with opposing charges. A higher proportion of the coating reaches and coats the object than would occur in the absence of a charge.
- 15) **EMISSION CONTROL SYSTEM (ECS)** - A system, approved in writing by the Control Officer, designed and operated in accordance with good engineering practice to reduce emissions of volatile organic compounds. Such system consists of an emissions collection subsystem and an emissions processing subsystem.
- 16) **ENAMEL** - Any non-lacquer topcoat.
- 17) **END SEALING COMPOUND** - A compound which is coated onto can ends and functions as a gasket when the end is attached to the can.
- 18) **EXEMPT EVAPORATING COMPONENTS (EXEMPT COMPOUNDS)** - The non-VOC, evaporating portion of a coating formulation; this necessarily includes all non-precursor organic compounds, as well as water and other inorganic liquids and gases.
- 19) **EXTERIOR CAN-BASECOAT** - Any coating applied to the exterior of a can to provide protection for the metal or to provide background for any lithographic or printing operation.
- 20) **EXTREME PERFORMANCE COATING** - A coating used on a surface where the coated surface in its intended use is at temperatures consistently in excess of 250°F (121°C).
- 21) **FABRIC** - Textile material. Non-manufactured items from nature are not fabric except for natural threads, fibers, filaments, and similar that have been manufactured into textile fabric.
- 22) **FABRIC COATING** - Any decorative or protective coating or reinforcing material applied onto or impregnated into textile fabric.
- 23) **FILM COATING** - Any coating applied in a web coating process on film substrate other than paper or fabric, including, but not limited to, typewriter ribbons, photographic film, magnetic tape and metal foil gift wrap.
- 24) **FLEXIBLE PLASTIC PART OR PRODUCT** - A plastic part or product designed to withstand significant deformation without damaging it for its intended use. Not included are flexible plastic parts that are found on a can, coil, metal furniture, or large appliance, or that are already a part of an aerospace component, highway vehicle, mobile equipment, architectural building or structure, or a previously coated marine-vessel.
- 25) **HARDENER** - A coating component specifically designed to promote a faster cure of an enamel finish.

- 26) **HEAT SENSITIVE MATERIAL** - Materials which cannot consistently be exposed to temperatures greater than 203°F (95°C) without materially affecting desired function, performance, or other characteristics.
- 27) **HIGH-VOLUME LOW PRESSURE (HVLP) APPLICATION** - A type of coating spray system in which the final air pressure does not exceed 10 psig (67 kilopascals) and which depends on relatively large volumes of air to atomize the coating.
- 28) **HIGHWAY VEHICLE** - Any vehicle that is physically capable of being driven upon a highway including, but not limited to, cars, pickups, vans, trucks, truck-tractors, motor-homes, motorcycles, and utility vehicles.
- 29) **INTERIOR BASECOAT** - Any coating applied to the interior of a can to provide a protective lining between the intended contents and the metal shell of the can.
- 30) **INTERIOR BODY SPRAY** - Any coating sprayed onto the interior of a can to provide a protective film between the intended contents and the metal shell of the can.
- 31) **LACQUER** - A coating which becomes or remains soft when subjected to heat (thermoplastic), which dries primarily by solvent evaporation, and which is resolvable in its original solvent.
- 32) **MIXING INSTRUCTIONS** - The coating or coating component manufacturer's or importer's specification of the quantities of coating components for mixing a coating.
- 33) **MULTI-COLORED TOPCOAT** - A topcoat that exhibits more than one color, is packaged in a single container, and camouflages surface defects on areas of heavy use, such as cargo beds and other surfaces of trucks and other utility vehicles.
- 34) **LARGE APPLIANCE** - A door, case, lid, panel, or interior support part of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, evaporative coolers and other similar products.
- 35) **LEAK FREE** - Having no organic liquid leak of more than three drops per minute from any single leak source, other than the disconnect operation of liquid fill line and vapor line.
- 36) **LOW PRESSURE SPRAY GUN** - An air-atomized spray gun that, by design, functions best at tip pressures below 10 psig (516 mm Hg), measured according to subsection 503.1d of County Rule 336, and for which the manufacturer makes no claims to the public that the gun can be used effectively above 12 psig (619 mm Hg).
- 37) **METAL FURNITURE** - Any furniture made of metal or any metal part which will be assembled with other parts made of metal or other material(s) to form a furniture piece.
- 38) **MINUS EXEMPT COMPOUNDS or MINUS EXEMPT EVAPORATING COMPONENTS** - See *VOC Content Minus Exempt Compounds*.

- 39) **MOBILE EQUIPMENT** - Any equipment that is physically capable of being driven or drawn upon a highway including, but not limited to, the following types of equipment: construction vehicles (such as mobile cranes, bulldozers, concrete mixers); farming equipment (wheel tractor, plow, pesticide sprayer); hauling equipment (truck trailers, utility bodies, camper shells); and miscellaneous equipment (street cleaners, mopeds, golf carts).
- 40) **NON-PRECURSOR ORGANIC COMPOUND** - Any of the organic compounds which have been designated by the EPA as having negligible photochemical reactivity. EPA designates such compounds as "exempt". A listing of these compounds is found in County Rule 100.
- 41) **ORGANIC COMPOUND** - Any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, carbonates, and metallic carbides.
- 42) **OTHER METAL PARTS AND PRODUCTS** - Any metal part or product, excluding the following items that are made of metal: can, coil, furniture, large appliance, aerospace component, metal foil, metal textile fabric, semiconductor metal, highway vehicle, mobile equipment, an architectural building or structure, a previously coated marine-vessel.
- 43) **OVERVARNISH** - Any coating applied to a can to reduce the coefficient of friction, to provide gloss, or to protect the finish against abrasion and/or corrosion.
- 44) **PAPER COATING** - Any coating applied on or impregnated into paper, including, but not limited to, adhesive tapes and labels, book covers, post cards, office copier paper, drafting paper and pressure sensitive tapes.
- 45) **PLASTIC** - Any solid, synthetic: resin, polymer, or elastomer, except rubber. For the purposes of this rule, plastic film is considered film; fabric and paper made of polymeric plastic fibers are considered fabric and paper, respectively.
- 46) **POLYESTER and POLYESTER RESIN** - A complex, polymeric ester containing difunctional acids.
- 47) **POLYESTER COMPOSITE** - Cured material made of polyester resin with reinforcing material imbedded in it, such as glass fibers.
- 48) **PRIMER** - A coating applied directly to substrate for any one or combination of the following purposes: corrosion prevention, protection from the environment, functional fluid resistance, or adhesion of subsequent coatings.
- 49) **QUALITY CLASS Q** - Any system, structure, coating or other component which, if defective or inoperable, could cause or increase the severity of a nuclear incident, thereby imposing undue risk to the health and safety of the public.
- 50) **REFINISHING** - Recoating a used object's surface which arrives at the refinisher with a coating or with a previous coating worn away by use.

- 51) **REPAIR COATING** - A coating or coating operation used to recoat the portion of a completed finish that suffered post-production damage at the facility where the finish was applied.
- 52) **RESPONSIBLE OFFICIAL** - One of the following:
- a) For a corporation: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more operating facilities applying for or subject to a permit and the delegation of authority to such representatives is approved in advance by the Department;
  - b) For a partnership or sole proprietorship: A general partner or the proprietor respectively;
  - c) For a municipality or other public agency: Either a principal executive officer or ranking elected official.
- 53) **RESTRICTED SPRAY GUN** - Any air-atomizing spray gun that is not a low pressure spray gun, and any other coating gun that is not on the list in Permit Condition #5.C.
- 54) **SILICONE RELEASE COATING** - Any resin coating, the major cured portion of which is silicone resin, having as its primary function the release of food products from metal surfaces such as baking pans.
- 55) **SMALL SURFACE-COATING SOURCE (SSCS)** - A facility from which the total VOC emissions for all surface coating operations that are subject to this rule without, or prior to, any emission control, is less than 15 pounds (6.8 kg) per day and less than 2 tons (1814 kg) per year; as demonstrated by both adequate records of coating and diluent use (pursuant to Permit Condition #6.B) and a separate tally of the number of days each month that such coating operations occur.
- 56) **STRIPPABLE BOOTH COATING** - A temporary coating that is applied to spray booth surfaces to receive the overspray and protect the surfaces, and which is designed to readily be pulled off the substrate in strips or sheets, and disposed of.
- 57) **SURFACE COATING** - Any liquid, fluid, or mastic composition which is converted to a solid (or semi-solid) protective, decorative, or adherent film or deposit after application as a thin layer. Surface coating is generally distinct and different from impregnation and from applying adhesive for bonding purposes.
- 58) **SURFACE COATING OPERATION** - Preparation, handling, mixing, and application of surface coating, and cleanup of application-equipment and enclosures at a facility where surface coating is applied.
- 59) **THINNER** - Any solvent used to reduce the viscosity or solids content of a coating.

- 60) **THREE-PIECE CAN SIDE-SEAM COAT** - Any coating sprayed onto the interior and/or exterior of a can body seam on a three-piece can to protect the exposed metal.
- 61) **TOPCOAT** - The final, permanent, coating-formulation that completed the finish on a surface.
- 62) **TOTAL VOC VAPOR PRESSURE (VOC COMPOSITE PARTIAL PRESSURE)** - The sum of the partial pressures of the compounds defined as VOCs, calculated according to the formula in Section 504 of this rule.
- 63) **TOUCH UP COATING** - A coating used to cover minor coating imperfections after the main coating operation. This includes touch-up coating that accompanies the purchase of an object already coated with that coating.
- 64) **TWO-PIECE CAN EXTERIOR END COAT** - Any coating applied to the exterior end of a can to provide protection to the metal.
- 65) **VINYL COATING (COATING ON VINYL)** - Any decorative or protective coating or reinforcing coating applied over vinyl-coated textile fabric or vinyl sheets.
- 66) **VOC-BORNE COATING** - A coating that contains more VOC than water, by weight.
- 67) **VOC-BORNE DILUENT** - A solvent or other diluent that contains more VOC than water, by weight.
- 68) **VOC CONTENT** - In this rule, VOC content is determined by one of the following two formulas: To determine compliance with Table 1 or the 2.0 lb. VOC/gal threshold in Permit Condition #5.B, use the following formula in Permit Condition #2.A.68.a; For other purposes, use the formula in Permit Condition #2.A.68.b:

- a) **VOC CONTENT MINUS EXEMPT COMPOUNDS** (is the same as **VOC CONTENT MINUS EXEMPT EVAPORATING COMPONENTS**) (also known as “**THE EPA METHOD 24 VOC CONTENT**” on manufacturer’s data sheets.)

$$\text{VOC Content Minus Exempt Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Using consistently either English or metric measures in the calculations, where:

$W_s$  = weight of all volatile material in pounds (or grams), including VOC, water, non-precursor organic compounds and dissolved vapors

$W_w$  = weight of water in pounds (or grams)

$W_{es}$	=	weight of all non-precursor compounds in pounds (or grams)
$V_m$	=	volume of total material in gallons (or liters)
$V_w$	=	volume of water in gallons (or liters)
$V_{es}$	=	volume of all non-precursor compounds in gallons (or liters)

**b) VOC CONTENT OF MATERIAL (MATERIAL VOC-CONTENT)**

$$\text{VOC Content Of Material} = \frac{W_s - W_w - W_{es}}{V_m}$$

Using consistently either English or metric measures in the calculations, where:

$W_s$	=	weight of all volatile material in pounds (or grams) including VOC, water, non- precursor organic compounds and dissolved vapors
$W_w$	=	weight of water in pounds (or grams)
$W_{es}$	=	weight of all non-precursor compounds in pounds (or grams)
$V_m$	=	volume of total material in gallons (or liters)

**69) VOLATILE ORGANIC COMPOUND (VOC) -** Any organic compound which participates in atmospheric photochemical reactions, except non-precursor organic compounds.

**B. SOLVENT CLEANING DEFINITIONS:** For the purpose of solvent cleaning aspects of this permit, the following definitions shall apply:

- 1) AGITATION, AGITATED -** A means or state that moves cleaning liquid continuously back and forth, or up and down. This includes such motion created by sound waves, and to the splashing of a rinse stream operated at a pressure that creates a trajectory exceeding 2 feet along the horizontal plane intersecting the nozzle when the nozzle is at a 45° angle above the plane. Liquid motion incidental to a continuous entrance or withdrawal of objects undergoing cleaning is not agitation.
- 2) BATCH CLEANING MACHINE -** A solvent cleaning machine in which individual parts or a set of parts move through the entire cleaning cycle before new parts are introduced into the solvent cleaning machine. A solvent cleaning machine, such as a ferris wheel or a cross-rod degreaser, that cleans multiple batch loads simultaneously and is manually loaded, is a batch cleaning machine.
- 3) BLASTING/MISTING WITH SOLVENT -** Cleaning with an applicator that propels cleaning-solvent through the air with a pressure exceeding 10 psig (516 mm Hg), or that atomizes the solvent into mist and/or droplets.

- 4) **CABINET STYLE CLEANING MACHINES** - Cleaning machines typically similar in design to domestic dishwashers that are completely enclosed except for optional stack, and have their own reservoir and sump.
- 5) **CARRY-OUT** - Solvent carried out of a cleaning machine along with a part being removed from the cleaning machine. The solvent may exist as a liquid coating the part or the part's hanger, or as a liquid entrapped in cavities and irregular surfaces, or entrapped by capillary action within or on the part.
- 6) **CLEANING-SOLVENT** - Solvent used for cleaning that contains more than 2.0% VOC by weight and more than 20 grams of VOC per liter (0.17 lb/gal).
- 7) **CONFORMING SOLVENT** - A cleaning-solvent that has a Total VOC Vapor Pressure conforming to the limits in Table 2 (Permit Condition #5.M.1). On November 1, 2001, and thereafter, the limit is 1 mm Hg at 20°C (68°F).
- 8) **DEGREASER** - See **SOLVENT CLEANING MACHINE**.
- 9) **DRY SOLID** - Any substance that appears and feels dry and that shatters or pulverizes when struck with a hard object. Evaporating solids, all of which have a strong odor, are not included.
- 10) **EMISSION CONTROL SYSTEM (ECS)** - A system, approved in writing by the Control Officer, designed and operated in accordance with good engineering practice to reduce emissions of volatile organic compounds. Such system consists of an emissions collection subsystem and an emissions processing subsystem.
- 11) **FLUSHING WITH SOLVENT** - Introducing cleaning-solvent directly into the internal space(s) of an object or assembly using a hose or pipe.
- 12) **FREEBOARD HEIGHT** -
  - a) **Batch Cleaning Machine:** The vertical distance from the solvent/air interface to the least elevated point of the top-rim when the cover is open or removed, measured during idling mode.
  - b) **In-Line Cleaning Machine:** The vertical distance from the solvent/air interface to the lowest entry/exit point, measured during idling mode.
- 13) **FREEBOARD RATIO** - The freeboard height divided by the smaller of the inside horizontal length or the inside horizontal width of the evaporative surface area within the cleaning machine (degreaser).
- 14) **HEATED SOLVENT** - Any cleaning-solvent which is heated by a device to a temperature exceeding 120°F (38°C).
- 15) **IMPERVIOUS** - Neither absorbing, adsorbing, nor allowing penetration through, by liquid or vapors.

- 16) **IN-LINE CLEANING MACHINE (CONTINUOUS CLEANING MACHINE)** - A solvent cleaning machine that uses an automated handling system, typically a conveyor or automated arm(s), to automatically provide a continuous supply of items to be cleaned. The cleaned item leaves by a route different from its entry route.
- 17) **LEAK** - The state or condition in which a cleaning-solvent, excluding a Low-VOC Cleaner, is allowed to seep or drip, or otherwise enters or escapes, at either the following rate or magnitude:
- a) Three or more drops of liquid cleaning-solvent per minute; or
  - b) Any puddle of cleaning-solvent greater than 1 square inch.
- 18) **LOW-VOC CLEANER** - Any solution or homogeneous suspension that, as used, contains less than 50 grams of VOC per liter of material (0.42 lb. VOC/gal) or is at least 95% water by weight or volume as determined by an applicable test method in Section 502 of County Rule 331. Within Section 300 and Section 500 of this County Rule 331, a Low-VOC Cleaner is subject only to Section 301, Section 302, subsection 307.1, subsection 501.1a, and subsection 501.2.
- 19) **MAKE-UP SOLVENT** - The increment of cleaning-solvent that replaces solvent lost through evaporation or other means, and that is added to the solvent remaining in a cleaning machine (degreaser) to bring solvent quantity to the desired level.
- 20) **MATERIAL VOC CONTENT** - See **VOC CONTENT OF MATERIAL**.
- 21) **NON-CONFORMING SOLVENT** - A cleaning-solvent that has a Total VOC Vapor Pressure which exceeds the limits in Table 2 (Permit Condition #5.M.1) but is legal to use in operations to which this rule applies, because at least one of the following subsections applies to the solvent cleaning operation in which the solvent is used:
- a) The emissions from the operation are controlled by a Sealed System per Permit Condition #5.M.2; or
  - b) The operation is exempted by Permit Condition #5.O.2.
- 22) **NON-PRECURSOR ORGANIC COMPOUND** - Any of the organic compounds which have been designated by the EPA as having negligible photochemical reactivity. EPA designates such compounds as "exempt". A listing of the compounds is found in County Rule 100.
- 23) **ORGANIC COMPOUND** - Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.
- 24) **REFRIGERATED FREEBOARD CHILLER** - A control device which is mounted above any cooling-water jacket or primary condenser coils, consisting of secondary coils which carry a refrigerant to provide a chilled air blanket above the solvent vapor/air interface to reduce emissions from the cleaning machine (degreaser) bath.

- 25) **REMOTE RESERVOIR CLEANING MACHINE (DEGREASER)** - Any non-vapor cleaning machine (degreaser) in which the reservoir for storing the cleaning-solvent is completely separated by impervious surfaces from the sink or basin where cleaning is performed, except for a connecting tube or isthmus through which solvent returns to the reservoir when cleaning is stopped.
- 26) **SEALED SYSTEM** - An Airtight or Airless Cleaning System that is operated and equipped pursuant to Permit Condition #5.M.2.
- 27) **SOLVENT** - For the purposes of this rule, any liquid or vapor which is used to dissolve, clean, strip, or remove impurities, coatings, contaminants, or films from surfaces or from internal spaces and voids. In addition to VOC-containing solvents, this also includes plain water and mixtures containing water.
- 28) **SOLVENT CLEANING MACHINE (CLEANING MACHINE) (DEGREASER)** - Any liquid container and ancillary equipment designed to clean surfaces and/or remove surface contaminants using cleaning-solvents.
- 29) **SOLVENT/AIR INTERFACE -**
- a) Non-Vapor Cleaner: The location of contact between the liquid solvent and the air.
  - b) Vapor Cleaner: The location of contact between the concentrated layer of solvent vapor and the air.
- 30) **SOLVENT/AIR INTERFACE AREA -**
- a) Non-Vapor Cleaner:
    - 1) With Included/Integral Reservoir: The surface area of liquid cleaning-solvent that is exposed to the air.
    - 2) With Remote Reservoir: The surface area of the solvent sink or work area.
  - b) Vapor Cleaner: The area of the horizontal plane that is located halfway between the highest and lowest points of the primary condenser coils and which contacts the interior walls of the cleaning machine.
- 31) **TOTAL VOC VAPOR PRESSURE (VOC COMPOSITE PARTIAL PRESSURE)** - Within a solution or homogenous mixture, it is the sum of the partial pressures of all those components that are defined as VOCs, calculated according to the formula in County Rule 331 subsection 502.3.
- 32) **VAPOR CLEANING MACHINE** - Any cleaning machine in which solvent-vapor from boiling cleaning solvent is utilized for cleaning objects introduced into the vapor zone.
- 33) **VOC CONTENT OF MATERIAL (MATERIAL VOC CONTENT) -**

$$\text{VOC CONTENT OF MATERIAL as a percent} = \frac{W_s - W_w - W_{es}}{W_m} \times 100\%$$

Using consistently either pounds or grams in the calculations, where:

$W_s$  = weight of volatile material in pounds (or grams), including water, non-precursor organic compounds, and dissolved vapors.

$W_w$  = weight of water in pounds (or grams)

$W_{es}$  = total weight of non-precursor organic compounds in pounds(or grams)

$W_m$  = weight of total material in pounds(or grams)

$$\text{VOC CONTENT OF MATERIAL in pounds per gallon (g/l)} = \frac{W_s - W_w - W_{es}}{V_m}$$

Using consistently either English or metric measures in the calculations, where:

$W_s$  = weight of all volatile material in pounds (or grams) including VOC, water, non-precursor organic compounds and dissolved vapors.

$W_w$  = weight of water in pounds (or grams)

$W_{es}$  = weight of all non-precursor compounds in pounds (or grams)

$V_m$  = volume of total material in gallons (or liters)

**34) VOLATILE ORGANIC COMPOUND (VOC)** - Any organic compound which participates in atmospheric photochemical reactions, except non-precursor organic compounds.

**35) WIPE CLEANING** - That method of cleaning which utilizes a material such as a rag wetted with solvent, coupled with a physical rubbing process, including automated rubbing, to remove contaminants from surfaces.

**C. ABRASIVE BLASTING DEFINITIONS:** For the purpose of abrasive blasting aspects of this permit, the following definitions shall apply:

**1) ABRASIVE BLASTING** - The operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface.

**2) ABRASIVE BLASTING EQUIPMENT** - Any equipment utilized in abrasive blasting operations.

**3) CONFINED BLASTING** - Any abrasive blasting conducted in an enclosure which significantly reduces air contaminants from being emitted

to the ambient atmosphere, including but not limited to shrouds, tanks, buildings and structures.

- 4) **HYDROBLASTING** - Any abrasive blasting using high-pressure liquid as the propelling force.
- 5) **MULTIPLE NOZZLES** - A group of two or more nozzles being used for abrasive cleaning of the same surface in such close proximity that their separate plumes are indistinguishable.
- 6) **WET ABRASIVE BLASTING** - Any abrasive blasting using compressed air as the propelling force and sufficient water to minimize the plume.

### **Section 3. Authorization Under This General Permit**

Any Surface Coating Operation, as defined in Section 2 of this General Permit, shall be eligible for coverage under this General Permit if the operation meets the requirements as specified in Sections 4 and 5. However, if a Surface Coating Operation does not meet the provisions of Sections 4 and 5, the operation will be considered ineligible for coverage and the applicant may be required by the Control Officer to obtain an individual source permit.

- A. **Authority to Operate (ATO) or Construct:** A facility is not covered by this General Permit unless a complete application for an ATO is filed with the Control Officer.
- B. **Effective Date and Expiration Date of Authorization:** This General Permit shall be valid for five years after the date it is signed by the Control Officer. All ATOs issued under this General Permit expire on the same date that this General Permit expires, regardless of when the ATO was issued. Any activity covered by this General Permit is authorized at the specified facility on the date the application is filed. The Control Officer will provide written notice of the expiration of this General Permit stating that the source must reapply for coverage. The Permittee may operate under the terms of this General Permit until the earlier of the date it submits a complete application for a new General Permit, or the filing deadline specified in the renewal notice sent by the Control Officer.
- C. **Requirements to File an Application for an Individual Source Permit:**
  - 1) **Denial of an ATO:** If the Control Officer notifies the Permittee that the application for coverage under the General Permit is denied, the applicant must file an individual source permit application within 180 days of receipt of the denial notice.
  - 2) **Revocation of Authority to Operate:** If an ATO has been issued and the Permittee is later notified by the Control Officer of the revocation of the authority to operate under this General Permit because of expiration, termination, or cancellation, the Permittee must file an application for an individual source permit. The application for an individual source permit must be filed within six months of receiving the notice from the Control Officer. The Permittee may continue to operate under this General Permit until the earlier of:
    - a) The date that it submits a complete application for an individual source permit, or
    - b) The date 180 days after receipt of the notice of expiration, termination, or cancellation.

- D. Issuance of an Individual Source Permit:** If the Control Officer issues an Individual Source Permit authorizing the same activity that is authorized by an ATO issued under this General Permit, the ATO shall become null and void on the date that the Individual Source Permit is issued.

#### **Section 4. General Requirements**

- A. Compliance Required:** The Permittee shall comply with the conditions and provisions of this Permit, and all air quality requirements of the Federal regulations, State Rules, and Maricopa County Rules. The Permittee shall halt or reduce activities if necessary to maintain compliance.
- B. Filing of an Application for an ATO:** Any facility that is eligible for this General Permit according to the requirements of Section 4 may apply for an ATO by completing the necessary application forms that are approved by the Control Officer. The application shall be completed, all necessary information provided, and the ATO application shall be signed by the responsible official before the application may be processed.

A source applying for an ATO under this Permit shall not propose nor accept, pursuant to Rule 220 emission limitations, controls, or other requirements that are not included in this General Permit.

- C. Leased/Rented/Borrowed Equipment:** If the Permittee leases, rents, or lends the facility or any equipment covered by this General Permit to a second party, the Permittee shall provide the second party with a copy of this General Permit and ATO. It is the responsibility of the person using the facility and equipment to make sure that it is properly operated. If the Permittee does not provide the second party with a copy of this General Permit, both the Permittee and the second party shall be responsible for any violation of this General Permit.
- D. Modifications:** Before the Permittee makes additions or modifications that will effect the Spray Coating Operation covered by this General Permit, a new ATO shall be obtained from the Control Officer before such new additions or modifications are installed or operated. This requirement does not apply to normal maintenance and repair activities.
- E. Pay Applicable Fees:** Sources applying for an ATO for this General Permit shall pay all fees to the Control Officer pursuant to Rule 280 of the Maricopa County Air Pollution Control Regulations, according to the following:
- 1) The applicant shall pay an application processing fee for a General Permit in full at the time the application for an ATO is submitted, according to the amounts specified in Rule 280. Permit fees paid shall not be refundable, except at the discretion of the Control Officer following the resolution of a fee dispute.
  - 2) The Permittee shall pay annual fees for a General Permit as specified in Rule 280. If fees are not paid within 30 days of annual billing, the facility is subject to delinquency fees as specified in Rule 280. Note: you will be notified by mail of any permit delinquency fees that are due and payable.
  - 3) If the applicant has paid the application processing fee but does not qualify for coverage under this General Permit and the ATO has not been issued,

the application processing fee may be applied toward the individual source permit fee.

- 4) Any disputes in the payment of the fees shall be submitted in writing to the Control Officer and required fees shall be paid regardless of the dispute, pending its resolution.
- F. Posting of a Permit:** The Permittee shall post a copy of the ATO at the covered facility in such a manner as to be clearly visible. A complete copy of the General Permit and the original ATO shall be kept on the site during the life of the permit.
- G. Property Rights:** This General Permit does not convey any property rights of any sort, or any exclusive privilege.
- H. Right to Entry and Inspection:** For the purpose of assuring compliance with this General Permit, the Permittee shall allow the Control Officer or authorized representative, upon presentation of proper credentials:
- 1) To enter upon the Permittee's premises where the source is located or emissions-related activity is conducted, or where records are required to be kept pursuant to the conditions of this Permit, and
  - 2) To have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this General Permit, and
  - 3) To inspect any source, at reasonable times, equipment (including monitoring and air pollution control devices), practices or operations regulated or required in this General Permit, and
  - 4) To sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this General Permit or other applicable requirements, and
  - 5) To record any inspection by use of written, electronic, magnetic, and photographic media.

No claim of confidentiality for trade secrets or commercial information available to the Permittee under Section 49-487 of the Arizona Revised Statutes or Rule 200 of the Maricopa County Air Pollution Control Regulations shall limit the scope of, or otherwise interfere with, an on-site inspection by a representative of the Control Officer.

- I. Severability:** The provisions of this General Permit are severable and, if any provision of this General Permit is held invalid, the remainder of this General Permit shall remain valid.

## **Section 5. Operational Requirements and Limitations**

The following permit conditions do not apply to coatings having a VOC content, minus exempt compounds, of less than 0.15 lb. VOC/gal (18g/L) nor to solvents having a VOC content of material less than 0.15 lb. VOC/gal, as determined from a manufacturer's product data document such as a current manufacturer's material safety data sheet (MSDS) that provides exact product contents.

The Permittee shall ensure that authorized activities are conducted in accordance with the following conditions:

## Spray Coating

### A VOC Content Limitations for Coatings:

The Permittee shall comply with one of the following for all applications of surface coatings:

- 1) Meet the limits in Table 1.

**Table 1**

Type of Surface Coating	LIMITS AS APPLIED* Pounds per gallon (grams/liter)
<b>Can Coating</b>	
Sheet Basecoat (Exterior & Interior) & Overvarnish	2.8 lb/gal (340 g/l)
2-piece Can Exterior (Basecoat & Overvarnish)	2.8 lb/gal (340 g/l)
Two and Three-Piece Can Interior Body Spray	4.2 lb/gal (510 g/l)
Two-Piece Can Exterior End (Spray or Roll Coat)	4.2 lb/gal (510 g/l)
Three-Piece Can Side-Seam Spray	5.5 lb/gal (660 g/l)
End Sealing Compound	3.7 lb/gal (440 g/l)
Can Printing Ink	2.5 lb/gal (300 g/l)
Coil Coating (any coat)	2.6 lb/gal (310 g/l)
Metal Furniture Coating	3.0 lb/gal (360 g/l)
Large Appliance Coating	2.8 lb/gal (340 g/l)
<b>Other Metal Parts &amp; Products Coating (As defined in County Rule 336 §231)</b> The following includes Non-adhesive Coating, Adhesive, Adhesive Primer, Caulking, and Beaded Sealants:	
Air-Dried Coating	3.5 lb/gal (420 g/l)
Baked Coating (above 200°F (93°C))	3.0 lb/gal (360 g/l)
Silicone Release Coating: Baked or Air-Dried	3.5 lb/gal (420 g/l)
Fabric Coating	2.9 lb/gal (350 g/l)
Film Coating	2.9 lb/gal (350 g/l)
Coating Plastic Parts & Products That are not Defined as Flexible	3.5 lb/gal (420 g/l)
<b>Coating Flexible Plastic Parts &amp; Products</b>	
Primer	4.1 lb/gal (490 g/l)
Color Topcoat	3.8 lb/gal (450 g/l)
Basecoat/Clear Coat (Combined System) - Limit for either coat	4.5 lb/gal (540 g/l)
Paper Coating, including Adhesives	2.9 lb/gal (350 g/l)
Vinyl Coating (Coating on Vinyl)	3.8 lb/gal (450 g/l)
Strippable Booth Coatings	2.0 lb/gal (240 g/l)

\* VOC content minus exempt compounds: is the same as VOC Content Minus Exempt Evaporating Components, also known as "The EPA Method 24 VOC Content" on manufacturer's data sheets.

- 2) Qualify for an exemption under one of the following:
  - a) Categorical Exemptions: These permit conditions do not apply to the following operations:
    - (1) Aerospace coating operations (Rule 348).

- (2) Architectural coating, including buildings and erected structures (Rule 335).
  - (3) Cleaning: VOC loss from cleaning or stripping a surface for coating or other purpose that is regulated by Rule 331 and conducted in accordance with County Rule 331.
  - (4) Marine vessel exterior refinishing.
  - (5) Polyester coatings applied to polyester composites,
  - (6) Printing and graphic arts coating (Rule 337).
  - (7) Semiconductor manufacturing (Rule 338).
  - (8) Coating a highway vehicle or mobile equipment (Rule 345).
  - (9) Wood: Coating Wood Furniture (Rule 342); Coating Wood Millwork (Rule 346).
- b) Exemptions For Qualified Materials: These Permit Conditions do not apply to the following materials that meet the specific qualification(s) and limitation(s) set forth herein:
- (1) Leak-Preventing Materials: Sealants, adhesives, caulking, and similar materials used on the following substrates for the primary purpose of leak prevention:
    - (a) Non-metallic substrates; and
    - (b) Used substrates, post manufacture, such as, but not limited to, old joints and seals on pipe and valve assemblies.
  - (2) Adhesive Use:
    - (a) Adhesive and adhesive primer applications are exempt from this rule, except for the 2 categories that appear in Table 1, namely adhesive materials applied to other metal parts and products (as defined in Permit Condition #2.A.42), and adhesives used in paper coating (as defined in Permit Condition #2.A.44 of these Permit Conditions).
    - (b) Any adhesive exempted by these Permit Conditions and to which no other County Rule in Regulation III specifically applies shall comply with the provisions of County Rule 330 (Volatile Organic Compounds).
  - (3) Certain Joint Fillers: Caulking and beaded sealants used to fill gaps or to fill joints between surfaces are exempt from this rule, except those used in manufacturing other metal parts and products (as defined in Permit Condition #2.A.42) of these Permit Conditions, or in the manufacturing of cans.

- (4) Extreme Performance Coatings: Extreme performance coatings are exempt from the VOC limits of Table 1 when used under the following conditions:
  - (a) Used on internal combustion engine components that are normally above 250°F (121°C) during use; or
  - (b) Used at temperatures above 250°F (121°C) on items that are both included under SIC (Standard Industrial Classification, 1987) codes 3661, 3663, 3669, 3677, 3678, 3679, or 3769 and are electronic products in space vehicles and/or are communications equipment. The US Government Printing Office "Standard Industrial Classification Manual, 1987" (and no future editions) is incorporated by reference and is on file at Maricopa County Environmental Services Department, 1001 N. Central Avenue, Suite 201, Phoenix, Arizona 85004-1942.
- c) Spray Gun And VOC-Limit Exemptions: The following are exempt from the VOC content requirements and the application method requirements of these Permit Conditions:
  - (1) Coating with an aerosol can.
  - (2) Touch up or repair-coating operations as defined in Permit Condition #2.A.63 and A.51 respectively.
  - (3) Low usage coatings which in aggregate of all formulations do not exceed 55 gallons (208 liters) per year facility-wide if the operator updates usage-records of these coatings on each day of their use, pursuant to Permit Condition #6.B.
  - (4) A Quality Class Q protective coating that is used on equipment, structures, and/or components within a containment facility of a nuclear power plant and is approved in accordance with either ANSI standards N101.2 and N101.4 or with ASTM Standards D3911 and D3843.
  - (5) A tactical military-equipment coating that is approved in an MCESD Air Pollution Permit subsequent to a sufficient demonstration by the user that no compliant substitute exists.
- d) Special Facilities/Operations: Bonding Impact Resistant Rubber Lining To Metal: An adhesive and an adhesive-primer are exempt from Table 1 limits, but shall not have a VOC content of material exceeding 850 grams of VOC per liter (7.1 lb/gal), if such adhesive is used to bond sheets/strips of rubber to metal equipment so that such rubber sheathing directly contacts material received by the metal and so protects the metal. This exception does not apply to

any other situations where adhesives are used to bond rubber to metal.

- e) Low-Usage Allowance For Restricted Guns: The Permittee may employ spray guns otherwise prohibited by the application methods section of these Permit Conditions for use with coatings over 2 lb. VOC /gal under the following limited conditions:

- (1) To coat the inside of pipes and tubes with a wand-style applicator.
- (2) Using an airbrush or other small gun that has a reservoir capacity not exceeding 250 cc (8.8 fluid ounces) and is used solely for detailing, lettering, touchup, and/or repair.

**B. Application Methods for Surface Coating:**

The Permittee shall employ one of the following for all applications of surface coating containing more than 2 pounds of VOC per gallon (240 g/L) minus exempt compounds:

- 1) A low pressure spray gun; or
- 2) An electrostatic system; or
- 3) A system that atomizes principally by hydraulic pressure, including "airless" and "air assisted airless"; or
- 4) Non-atomizing or non-spraying application methods, such as but not limited to dipping, rolling, or brushing; or
- 5) Any method which is approved by the Administrator of the Federal EPA and the Control Officer as having a transfer efficiency of 65% or greater.

**C. Cleanup of Application Equipment:** The Permittee shall comply with the following when using VOC-containing material to clean application equipment:

- 1) Disassemble any spray gun and other application equipment and clean it in:
  - a) A container which remains covered at all times, except when the application equipment is being handled in the container, or transferred into or out of the container; or
  - b) A commercially sold gun cleaning machine which shall be operated and maintained according to manufacturer's or distributor's instructions.
- 2) Vapor Pressure Limits: For whenever using VOC-solvent to clean coating application equipment, the Permittee shall use only solvent which, as used, has either:
  - a) A VOC-vapor pressure below 35 mm Hg at 20° C (68° F),

Or for sprayless equipment,

- b) A solvent that has at 20° C (68° F) a total VOC vapor pressure above 35mm Hg only if:
  - (1) Such application equipment does not use spray devices, and
  - (2) The same principal solvent is used for cleaning as is used in the coating.

**D. Handling and Disposal of VOC:**

- 1) Use And Storage: **The** Permittee shall:
  - a) Cover and keep covered each VOC-containing material which is not currently in use.
  - b) Store finishing and cleaning materials in closed or covered leak-free containers.
- 2) Disposal Of VOC And VOC-Containing Material: The Permittee shall store all VOC-containing materials intended for disposal including, but not limited to, rags, waste coatings, waste brushes, waste rollers, waste applicators, waste solvents, and their residues, in closed, leak free containers which are legibly labeled with their contents and which remain covered when not in use.

**E. Coating and Solvent Usage:** The Permittee shall not allow the monthly and annual usage of combined coatings, diluents, and cleaning solvents (including those for spray coating, wipe cleaning, and for, if applicable, County Rule 331 governed solvent cleaning) to exceed any of the limits in the following table:

Material	Maximum Monthly Usage Limits	Rolling Twelve Month Usage Limit
Coating (s) + Diluent(s) + Cleaning Solvent(s)	<b>375 gallons</b>	<b>4500 gallons</b>

The Rolling Twelve Month Limit shall include every period of twelve consecutive calendar months.

**F. Maintenance:** The Permittee shall operate and maintain in proper working order all production and cleaning equipment in which VOC-containing materials are used or stored.

**G. Paint Booth:** The Permittee shall conduct spray coating operations in such a manner that one of the following conditions (5.G.1 or 5.G.2) is met:

- 1) If equipment is operated in enclosures located outside a building spray coating equipment shall be operated inside an enclosure which has at least three sides a minimum of eight feet in height and able to contain any object or objects being coated.
  - a) For enclosures that are three-sided, the Permittee shall direct spray in a horizontal or downward pointing manner so that overspray is directed at the walls or floor of the enclosure. No

spraying shall be conducted within three feet of any open end and/or within two feet of the top of the enclosure.

- b) For enclosures with three sides and a roof or complete enclosures, the Permittee shall direct spray into the enclosure so that the overspray is directed away from any opening in the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of any open top of the enclosure.
- 2) For equipment operated with forced air exhaust vented directly outside, the Permittee shall equip the booth with a filtering system with an average overspray removal efficiency of at least 92% by weight for the type of material being sprayed as certified by the manufacturer or by ASHRAE Standard 52-76. No gaps, sags or holes shall be present in the filters and all exhaust must be discharged vertically into the atmosphere. Spray Booths or enclosures utilizing a water curtain, waterfall or other means to capture particulates in a liquid medium shall effectively remove at least 92% of the overspray and be operated in a manner consistent with the manufacturer's specifications to achieve such efficiency for the type of material being sprayed.
- 3) The following are exempt from the paint booth requirements of this Permit Condition:
  - a) The spray coating of buildings or dwellings, including appurtenances and any other ornamental objects that are not normally removed prior to coating.
  - b) The spray coating of facility equipment or structures which are fixed in a permanent location and cannot easily be moved into an enclosure or spray booth and which are not normally dismantled or moved prior to coating.
  - c) The spray coating of objects which cannot fit inside of an enclosure with internal dimensions of 10'W X 25'L X 8'H.
  - d) Enclosures and spray booths and exhausts located entirely in a completely enclosed building, providing that any vents or openings do not allow overspray to be emitted into the outside air.
  - e) Coating operations utilizing only hand-held aerosol cans.

**H. Training:** Note: The Permittee should fully train all individuals before they are allowed to operate any surface coating equipment. Training shall include, at a minimum, proper application techniques, cleaning procedures, and equipment setup and adjustment, as well as recordkeeping, VOC containment, and VOC disposal requirements. Refresher training shall be given at least annually.

## **Fuel Burning**

### **I. Fuel Burning Limitations:**

- 1) The maximum manufacturer's heat input rating of any single fuel burning piece of equipment shall be less than 10 million BTU/Hr.

- 2) The maximum combined heat input rating for all fuel burning equipment (excluding internal combustion engines, which are not required to be covered by a permit) at the facility as a whole shall be less than 60 million BTU/Hr.
- 3) The Permittee may only use natural gas, propane, and butane as fuels.

#### **Solvent Cleaning**

**J. SOLVENT HANDLING REQUIREMENTS:** The Permittee shall comply with all of the following:

- 1) All cleaning solvent, including solvent soaked materials, shall be kept in closed leak free containers that are opened only when adding or removing material.
  - a) Rags used for wipe cleaning shall be stored in closed containers when not in use.
  - b) Each container shall be clearly labeled with its contents.
- 2) If any cleaning-solvent escapes from a container:
  - a) Wipe up or otherwise remove immediately if in accessible areas.
  - b) For areas where access is not feasible during normal production, remove as soon as reasonably possible.
- 3) Unless records show that VOC-containing cleaning material was sent offsite for legal disposal, it will be assumed that it evaporated on site.

**K. EQUIPMENT REQUIREMENTS FOR ALL CLEANING MACHINES:** The Permittee operating a cleaning machine to which these permit conditions apply must comply with all of the following:

- 1) Provide a leak free container (degreaser) for the solvents and the articles being cleaned.
  - a) The VOC-containment portion shall be impervious to VOC-containing liquid and vapors.
  - b) No surface of any freeboard required by this rule shall have an opening or duct through which VOC can escape to the atmosphere, except as required by OSHA.
- 2) Properly maintain and operate all cleaning machine equipment required by these Permit Conditions and any of its emission controls required by these Permit Conditions.

**L. SPECIFIC OPERATING & SIGNAGE REQUIREMENTS FOR CLEANING MACHINES:** The Permittee who cleans with cleaning-solvent other than a Low-VOC Cleaner must conform to all of the following operating requirements:

- 1) Operating Requirements:
  - a) Fans: Comfort fans shall not be used near cleaning machines.

- b) Cover: Do not remove any device designed to cover the solvent unless processing work in the cleaning machine or maintaining the machine.
  - c) Draining: Drain cleaned parts for at least 15 seconds after cleaning or until dripping ceases, whichever is later.
  - d) Spraying: If using a cleaning-solvent spray system:
    - (1) Use only a continuous, undivided stream (not a fine, atomized, or shower type spray).
    - (2) Pressure at the orifice from which the solvent emerges shall not exceed 10 psig and shall not cause liquid solvent to splash outside of the solvent container.
  - e) Agitation: The Permittee shall not cause agitation of a cleaning solvent in a cleaning machine by sparging with air or other gas. Covers shall be placed over ultrasonic cleaners when the cleaning cycle exceeds 15 seconds.
  - f) No Porous Material: Do not place porous or absorbent materials in or on a cleaning machine. This includes, but is not limited to, cloth, leather, wood and rope. No object with a sealed wood handle, including a brush, is allowed.
  - g) Vent Rates: The ventilation rate at the cleaning machine shall not exceed 65 cfm per square foot of evaporative surface ( $20 \text{ m}^3/\text{min.}/\text{m}^2$ ), unless that rate must be changed to meet a standard specified and certified by a Certified Safety Professional, a Certified Industrial Hygienist, or a licensed professional engineer experienced in ventilation, to meet health and safety requirements.
  - h) Hoist Speed: Limit the vertical speed of mechanical hoists moving parts in and out of the cleaning machine to a maximum of 2.2 inches per second and 11 ft/min (3.3 m/min.).
  - i) Contamination Prevention: Prevent cross contamination of solvents regulated by Permit Condition #5.M.1 and 2 of these Permit Conditions rule with solvents that are not so regulated. Use signs, separated work-areas, or other effective means for this purpose. This includes those spray gun cleaning solvents that are regulated by the Surface Coating Requirements of these Permit Conditions.
- 2) Signage Requirements: The Permittee who uses cleaning solvent, other than Low-VOC Cleaner, in any solvent cleaning machine (degreaser) or dip tank shall provide on the machine, or within 3¼ feet (1 meter) of the machine, a permanent, conspicuous label or placard which includes, at a minimum, each of the following applicable instructions, or its equivalent:
- a) "Keep cover closed when parts are not being handled." (This is not required for remote reservoir cleaners.)

- b) "Drain parts until they can be removed without dripping."
- c) "Do not blow off parts before they have stopped dripping."
- d) "Wipe up spills and drips as soon as possible; store used spill rags [or 'wiping material'] in covered container."
- e) "Don't leave cloth or any absorbent materials in or on this tank."
- f) For cleaning machines with moving parts such as hoists, pumps, or conveyors, post: "Operating instructions can be obtained from \_\_\_\_\_," listing a person or place where the instructions are available.

**M. SOLVENT SPECIFICATIONS:** All cleaning solvents, except Low-VOC Cleaners, used in non-boiling cleaning machines shall comply with either of the following:

- 1) Use a cleaning-solvent having a total VOC vapor pressure at 68°F (20°C) not exceeding the limits in Table 1:

**TABLE 2**

<b>Limit: Maximum Total VOC Vapor Pressure</b>	<b>Time Period Limit is in Effect</b>
2 millimeters of mercury column	From November 1, 1999 through October 31, 2001
1 millimeter of mercury column	From November 1, 2001 and thereafter.

or

- 2) Sealed System: Use a Sealed System that is an Airtight or Airless Cleaning System which is operated according to the manufacturer's specifications and, unless otherwise indicated by the manufacturer, meets all of the following requirements:
  - a) Has a door or other pressure-sealing apparatus that is shut during each cleaning and drying cycle; and
  - b) Has a differential pressure gauge that always indicates the pressure in the sealed chamber when occupied or in active use; and
  - c) Any associated pressure relief device(s) shall be so designed and operated as to prevent liquid cleaning-solvents from draining out.

**N. EQUIPMENT REQUIREMENTS:** Equipment requirements for batch cleaning machines are set forth in this Permit Condition. Low-VOC Cleaners are exempt from this Permit Condition.

- 1) With Remote Reservoir: A batch cleaning machine with remote reservoir, including cabinet type(s), shall be equipped with the following:
  - a) A sink-like work area or basin which is sloped sufficiently towards the drain so as to prevent pooling of cleaning-solvent.

- b) A single, unimpeded drain opening or cluster of openings served by a single drain for the cleaning-solvent to flow from the sink into the enclosed reservoir. Such opening(s) shall be contained within a contiguous area not larger than 15.5 square inches (100 cm<sup>2</sup>).
  - c) Solvent Return: Provide a means for drainage of cleaned parts such that the drained solvent is returned to the cleaning machine.
- 2) Cleaning Machine With Internal Reservoir (Non-Remote): A batch cleaning machine without a remote reservoir shall be equipped with all of the following:
- a) Have and use an internal drainage rack or other assembly that confines within the freeboard all cleaning-solvent dripping from parts and returns it to the hold of the cleaning machine (degreaser); and
  - b) Have an impervious cover which when closed prevents cleaning-solvent vapors in the cleaning machine from escaping into the air/atmosphere when not processing work in the cleaning machine.

A cover shall be fitted so that in its closed position the cover is between the cleaning-solvent and any lip exhaust or other safety vent, except that such position of cover and venting may be altered by an operator for valid concerns of flammability established in writing and certified to by a Certified Safety Professional or a Certified Industrial Hygienist to meet health and safety requirements.

- c) In the absence of additional applicable freeboard standards, freeboard height shall be not less than 6 inches (15.2 cm); and
- d) The freeboard zone shall have a permanent, conspicuous mark that locates the maximum allowable solvent level which conforms to the applicable freeboard requirements.

#### **O. EXEMPTIONS:**

- 1) Categorical Exemptions: Exemptions for Qualified Operations:  
  
Cleanup of Coating-Application Equipment: Operations involving the cleanup of coating-application equipment that are regulated by the Spray Coating Requirements of these Permit Conditions are exempt from the Solvent Cleaning Requirements of these Permit Conditions.
- 2) Partial Exemption: The following are exempt from these Solvent Cleaning Permit Conditions as noted:
  - a) Wipe Cleaning: The provisions of Permit Conditions #5.K through #5.N do not apply to wipe cleaning. Recordkeeping provisions in Permit Condition #6.G do apply to wipe cleaning.
  - b) Small Cleaners: The provisions of Permit Conditions #5.L through #5.N of these Permit Conditions shall not apply to any non-vapor

cleaning machine (degreaser) or dip-tank fitting either of the following descriptions, except that these shall be covered when work is not being processed:

- (1) A small cleaner having a liquid surface area of 1 square foot (0.09 square meters) or less, or
  - (2) A small cleaner having a maximum capacity of one gallon (3.79 liters) or less.
- 3) Exemptions from Permit Condition #5.M: The U.S. Government Printing Office "Standard Industrial Classification Manual, 1987" (and no future editions) is incorporated by reference and is on file at Maricopa County Environmental Services Department, 1001 N. Central Avenue, Suite 201, Phoenix, Arizona 85004-1942. The following are exempt from Permit Condition #5.M of these Permit Conditions:
- a) Non-furniture medical devices included in Standard Industrial Classification (SIC) codes 3841, 3843, 3844, or 3845, and products for internal use in 3842;
  - b) Electronic products for space vehicles and communications equipment in SIC codes 3661, 3663, 3669, 3677, 3678, 3679, and 3769; and
  - c) Production processes having clean-room standards equal to or more stringent than class 100,000 (particles/m<sup>3</sup>); and
- 4) Comfort Fans: The prohibition, in Permit Condition #5.L.1.a, against fans and fan-drafts being close to cleaning machines does not apply to a totally enclosed cleaning machine that cannot be penetrated by drafts.

### **Abrasive Blasting**

**P.** The Permittee shall not discharge into the atmosphere from any abrasive blasting any air contaminant for a period or periods aggregating more than three minutes in any one-hour period which is a shade or density darker than 20 percent opacity.

**Q.** The Permittee shall utilize at least one of the following control measures for all abrasive blasting:

- 1) Confined blasting,
- 2) Wet abrasive blasting,
- 3) Hydroblasting.
- 4) A control measure that has been determined by the Control Officer to be equally effective to control particulate emissions.

The following method is a control measure that has been determined by the Control Officer to be equally effective to control particulate emissions: The use of a California Air Resources Board (CARB) certified abrasive blasting media in dry, unconfined blasting operations provided that the following conditions are met:

- a) Only an abrasive(s) on the most recent CARB certification list may be used in the abrasive blasting process.
- b) Blasting is performed only on a metal substrate.
- c) The abrasive blasting medium is used only once.
- d) The existing paint on the surface to be abraded is lead free (i.e. lead content < 0.1%).
- e) Opacity limits of Rule 312 and these Permit Conditions are adhered to.
- f) The object to be blasted exceeds 8 feet in any dimension or the surface to be blasted is situated at its permanent location.
- g) Blasting is not performed at ground level on a surface which may be disturbed by the process and contribute to particulate emissions (e.g. unpaved ground).

## **Section 6. Monitoring/Recordkeeping Requirements**

**A.** The Permittee shall comply with the following Recordkeeping Requirements that apply to materials regulated by these Permit Conditions. Records shall be retained for 5 years and shall be made available to the Control Officer upon request.

- 1) **Current Lists:** The Permittee shall maintain a current list of coatings, adhesives, reducers, thinners, gun-cleaning materials, additives, and any other VOC-containing materials regulated by these Permit Conditions; give the VOC content of material for each as received (before thinning). A complete, neat assemblage of this data meets the requirements for a list.  
Express VOC content in 1 of 3 forms: pounds VOC per gallon, grams VOC per liter, or the percent VOC by weight along with the specific gravity or density, (2 numbers are required).
- 2) **Less Stringent Recordkeeping for consistently Low Users:** If the Permittee always uses less than 2 gallons per day total of thinner and coating (listed in Table 1), the listing and recording requirements of sections 6.A.1, 6.A.3, and 6.B are met if:
  - a) All purchase receipts/invoices of VOC-containing material that is regulated by this rule for the most recent 12 months are kept together; and
  - b) Current data sheets show the VOC content of material for every VOC-containing substance currently used that is regulated by these Permit Conditions.
- 3) **Facilities that are not Small Surface-Coating Sources:** Facilities that are not small surface-coating sources shall do the following:
  - a) **Coatings:** For all coatings (except those recorded under Permit Condition ~~5~~5.A.2.c(3) low usage allowance), the Permittee shall

make the following listings for coatings and adhesives that have VOC limits in Table 1:

- (1) VOC Before Reducing: The VOC content of each coating as received, minus exempt compounds. (This figure is sometimes called the "EPA Method 24" VOC content on manufacturer's data sheets). If the coating is a multi-part coating, list the VOC content which the manufacturer states the coating will have once all the necessary parts are mixed together in the proportions specified by the manufacturer.
- (2) List Maximum VOC Content Of Coating As Applied: For each coating that is thinned/reduced or that any additive is added to, record in a permanent log either of the following:
  - (a) The maximum number of fluid ounces thinner/reducer that is ever added to a gallon of unreduced coating (or maximum g/liter), and the maximum fluid ounces of every other additive that is mixed into a gallon of the coating; or
  - (b) The VOC content of the coating, after adding the maximum amount of thinner/reducer and other additives that would ever be added, as determined by the formula in Permit Condition #2.A.68.a of these Permit Conditions.
- b) Applicator Cleanup Solvent: The Permittee shall maintain a hardcopy of the VOC vapor pressure (VP) at 20°C (68°F) of solvent(s) used to clean spray guns, hoses, reservoirs, and any other coating application equipment. Any one of the following ways of providing the VP data is sufficient:
  - (1) A current manufacturer's technical data sheet;
  - (2) A current manufacturer's safety data sheet (MSDS);
  - (3) Actual test results; or
  - (4) A letter signed by an official or lab manager of the supplying facility.

**B. Frequency Of Updating Usage Records:** The Permittee shall update usage records, showing the type and amount used of each VOC-containing coating or adhesive which is regulated by name or type in Table 1, and update each VOC-containing material, related to surface coating, that is not addressed by Table 1. This includes, but is not limited to, thinners, surfacers, and diluents. Records shall be maintained according to the following schedule:

- 1) Small Surface-Coating Sources: If the Permittee is a small surface-coating source, each month's records of coating use shall be updated by the end of the following month.

- 2) All Other Sources: For a source that does not meet the definition of small surface-coating source:
  - a) Monthly: Monthly update records of each coating used that complies with the VOC limits in Table 1. Complete a month's update by the end of the following month.
  - b) Daily: Daily update the usage of each coating that exceeds its limits in Table 1, including coating exempted by Permit Condition #5.A.2.c(3).

**C. Grouping By VOC Content:** For purposes of recording usage, coatings and adhesives that are in the same category in Table 1, and have similar VOC content, may be recorded under a name that includes the category name. The highest VOC content among the members of that grouping shall be assigned to that grouping, rounded to the nearest 10th of a pound. To identify what products belong within each group, after each group name and the group's VOC content of material must appear the name of each product in the group and its VOC content of material. For example: For flexible plastic parts, you use 20 gallons of primer that has 3.04 lb. VOC/gal., 30 gallons of primer having 3.14 lb. VOC/gal., and 40 gallons of primer having 2.89 lb. VOC/gal. You may record usage as 90 gallons of flexible plastic primer containing 3.1 lb. VOC/gal. If grams VOC per liter is used to record VOC content, round off to the nearest whole number of grams.

**D. Compliance Determination and Test Methods:** When more than one test method is permitted for a determination, an exceedance of the limits established in the rule determined by any of the applicable test methods constitutes a violation of these Permit Conditions. The means that shall be used to determine compliance, with the Permit Conditions in this set that are based on County Rule 336, is listed in County Rule 336 §§503 and 504.

**E. Solvent Cleaning Recordkeeping and Reporting:** The Permittee subject to these Solvent Cleaning Permit Conditions shall comply with the following requirements. Records shall be retained for five years and shall be made available to the Control Officer upon request.

- 1) Current List:
  - a) Maintain a current list of cleaning-solvents; state the VOC-content of each in pounds VOC per gallon of material or grams per liter of material.
  - b. A facility using any cleaning-solvent subject to the vapor-pressure limits of Permit Condition #5.M.1 shall have on site the written value of the total VOC vapor pressure of each such solvent in one of the following forms:
    - (1) A manufacturer's technical data sheet,
    - (2) A manufacturer's safety data sheet (MSDS), or
    - (3) Actual test results.

- 2) Usage Records:

- a) Monthly: Records of the amount of cleaning-solvent used shall be updated by the end of month for the previous month. Show the type and amount of each make-up and all other cleaning-solvent to which this rule is applicable.
- b) Annually:
  - (1) Certain Concentrates: Use of concentrate that is used only in the formulation of Low VOC Cleaner shall be updated at least annually.
  - (2) Low-VOC Cleaner: The Permittee need not keep a record of a cleaning substance that is made by diluting a concentrate with water or non-precursor compound(s) to a level that qualifies as a Low VOC Cleaner if records of the concentrate usage are kept in accordance with this rule.
- c) Grouping By VOC Content: For purposes of recording usage, the Permittee may give cleaning-solvents of similar VOC content a single group-name, distinct from any product names in the group. The total usage of all the products in that group are then recorded under just one name. (In such a case, the operator must also keep a separate list that identifies the product names of the particular solvents included under the group name). To the group name shall be assigned the highest VOC content among the members of that group, rounded to the nearest 10th of a pound of VOC per gallon of material, or to the nearest gram VOC per liter of material.

- F. Temperature Measurement:** Temperature measurements made pursuant to the definitions section to determine if a cleaning machine contains a “heated solvent” shall be done with an instrument having an accuracy and precision of no less than 1 degree Fahrenheit.
- G.** The Permittee shall monitor for compliance with Operating Requirements of these Permit Conditions (if applicable) for solvent degreasers by conducting a visual inspection at least once a week and by recordkeeping of the inspection. During the visual inspection the Permittee shall check and note for each degreaser:
  - 1) The positions of the cover and whether the degreaser is in use,
  - 2) That the label of Signage Requirements is in place,
  - 3) Any instances of non-compliance of stored solvent, and
  - 4) For evidence of solvent leaking from the degreaser.
- H.** The Permittee shall maintain records of abrasive blasting monitoring including the dates when abrasive blasting activities are conducted, the type of abrasive material used, and the type of control measure used.

## Section 7. Reporting Requirements

- A. Certification of Truth, Accuracy, and Completeness:** Any document required to be submitted by this General Permit, including reports, shall contain a certification by the facility owner or other responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- B. Emission Inventory:** If notified by the Control Officer, the Permittee shall submit an annual emissions inventory report to the Department, Air Quality Division, Attention: Air Quality Emissions Unit Manager, in accordance with Rule 100 of the Maricopa County Air Pollution Control Regulations. The report shall include the throughput and any excess emissions reported during the previous calendar year.
- C. Excess Emissions and Malfunction Reporting:** Any emissions in excess of the limits established by this General Permit, and/or any malfunction in equipment that results in an excess emission, shall be reported to the Control Officer within 24 hours of the time of Permittee's knowledge of such. The Permittee shall provide the Department, Air Quality Division, Attention: Air Quality Compliance Section Manager, a detailed written report within 72 hours of the initial notification. This report shall include at least the following:
- 1) Nature and cause of such spill and/or emissions;
  - 2) Steps taken to cease or limit the spill or emissions;
  - 3) Amount and duration of the excess emissions; and
  - 4) Date and time the excess emissions began, and when the excess emissions ceased.
- D. Duty to Provide Information:** As directed, the Permittee or applicant for an ATO shall furnish to the Department any information requested pursuant to this General Permit within a reasonable time period and manner, as determined by the Control Officer. Failure to submit the requested information in a reasonable time period may lead to revocation of the ATO or denial of the application for an ATO under this General Permit. If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the application for an ATO, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts of corrected information.
- E. Emergency Reporting Provision:** An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error, pursuant to Rule 100 of the Maricopa County Air Pollution Control Regulations. In the event of an emergency, the Permittee shall:

- 1) As soon as possible, telephone the Control Officer giving notice of the emergency.
- 2) Submit a notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to an emergency. This notice shall contain:
  - a) A description of the nature and cause of the emergency;
  - b) Corrective action taken; and
  - c) Any steps taken to mitigate excess emissions.

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Al Brown, MPA, RS  
Maricopa County Air Pollution Control Officer

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Issuance Date